



A.D. 1868 2nd OCTOBER. N^o 3021.

S P E C I F I C A T I O N

OF

EDWARD O'CONNELL.

FEEDING BOTTLES.

LONDON:

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A.D. 1868, 2nd OCTOBER. N° 3021.  
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Feeding Bottles.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by Edward O'Connell at the Office of the Commissioners of Patents, with his Petition, on the 2nd October 1868.

I, EDWARD O'CONNELL, of Greenwich, in the County of Kent, do
5 hereby declare the nature of the said Invention for "IMPROVEMENTS
IN APPARATUS FOR SUPPLYING NOURISHMENT TO INFANTS, INVALIDS, AND OTHERS,"
to be as follows:—

My Invention relates to improvements in apparatus for which Letters
Patent were granted to me, dated respectively the 25th day of
10 April 1853, No. 987, and the 6th day of October 1859, No. 2274. In
the Specification of the latter Patent I describe a vessel with a neck or
contraction at the top, to the outside of which I fit a perforated capsule
lined with cork, india-rubber, or other suitable material, to which I
attach a glass or other tube extending nearly to the bottom of the vessel,
15 through which said tube the fluid is drawn to the mouth by suction.
To the neck of the said vessel I fit a flexible tube of any required length,
at the extremity of which I fix an artificial teat with a disc or shield to

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prevent the said teat being drawn too far into the mouth. It is found that artificial teats are liable to collapse or flatten in the mouth by suction, which prevents the food in the vessel from being effectually drawn through the said teat.

Now to prevent this defect my first improvement consists in attaching 5 to the joint at the end of the elastic tube leading from the bottle a short piece of flexible tubing of suitable diameter, either open at the extremity or closed to act as a valve, over which said tube an artificial teat is placed, so that neither suction nor the pressure of the mouth will collapse or flatten the said teat and tube; or the said short piece of 10 tubing may be a continuation of the elastic feeding tube if desired and pass through the joint to which the said artificial teat is attached.

Secondly, inside the cap or covering that fits over the neck of the bottle I place a washer of india-rubber, or other suitable material, through a hole in the centre of which the elastic feeding tube passes, 15 the material around the said hole having several radial slits made therein, the said slits causing this part of the washer to become weakened and to give way to external atmospheric pressure and admit air to the liquid in the bottle, but the liquid cannot pass out through the said slits as the pressure of air on the inside of the bottle is made less by suction 20 than the pressure of air on the outside thereof; or the elastic washer may form part of a cap or covering of the same material made to fit over the neck of the bottle; this washer thus described prevents the running or escape of the liquid from the bottle when the latter is laid in a horizontal position, and also prevents the escape of the liquid from the 25 teat should it fall from the mouth whilst in use.

Thirdly, I make a shield or mouth guard of india-rubber or other elastic material to prevent the danger of an infant being hurt or injured by the use of a harder and more rigid substance, the said shield or mouth guard being more nearly of the soft and flexible nature of the human 30 breast.

Fourthly, in order to make the cap or cover hold more firmly to the neck of the bottle, I make around the said neck a series of rings, the spaces between which are partially filled by any expansion that may take place in the material of that part of the cap or cover which comes 30 in contact with the said neck of the bottle, and grooves may be formed

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through the said rings through which the compressed air in the bottle may escape should the cap or cover be suddenly placed on the neck thereof.

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